

Helaian Data Keselamatan

Safety data sheet

Mukasurat (Page): 1/30

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

1. Pengenalan bahan kimia dan pembekal

Alverde®

Kegunaan: produk pelindung tanaman, racun serangga

Syarikat:

BASF (Malaysia) Sdn Bhd
Lot 19.02 Level 19, 1 Powerhouse
No 1 Persiaran Bandar Utama
47800 Petaling Jaya
Selangor D.E, MALAYSIA
Nombor Telefon: +60 3 7612 1888
Nombor Telefax: +60 3 7612 1777

Maklumat kecemasan:

Nombor Kecemasan Kebangsaan
+603 7612 1999
Nombor Kecemasan Antarabangsa:
Nombor Telefon: +49 180 2273-112

2. Pengenalan Bahaya

Pengelasan bahan dan campuran:

Akuatik Kronik 1

STOT RE 2

Pemb. Kategori tambahan untuk kesan pada atau melalui penyusuan.

Pemb. 2 (kesuburan)

Kros./Kreng. Mata 2

Pemb. 2 (bayi belum lahir)

Bagi pengelasan yang tidak ditulis dengan penuh dalam bahagian ini, teks lengkap boleh didapati di bahagian 16.

Unsur label dan pernyataan berjaga-jaga:

Piktogram:



Kata Isyarat:
Amaran

Pernyataan Bahaya:

H319	Menyebabkan kerengsaan mata yang serius.
H373	Boleh menyebabkan kerosakan kepada organ melalui pendedahan yang berpanjangan atau berulang.
H362	Boleh memudaratkan bayi yang menyusu badan.
H361fd	Disyaki menjejaskan kesuburan. Disyaki menjejaskan bayi belum lahir.
H410	Sangat toksik kepada hidupan akuatik dengan kesan yang berpanjangan.
EUH401	Untuk mengelakkan risiko kepada kesihatan manusia dan alam sekitar, patuhi arahan semasa menggunakan bahan.

Pernyataan berjaga-jaga:

P101	Jika nasihat perubatan diperlukan, dapatkan bekas atau label produk.
P102	Jauhkan daripada kanak-kanak.
P103	Baca label sebelum menggunakan produk.

Pernyataan Berjaga-jaga (Pencegahan):

P280	Pakai sarung tangan perlindungan, pakaian perlindungan dan perlindungan mata atau perlindungan muka.
P260	Jangan bernafas dengan menyedut kabus atau wap atau semburan
P201	Dapatkan arahan khas sebelum menggunakan produk.
P202	Jangan kendalikan sehingga semua langkah keselamatan telah dibaca dan difahami.
P263	Elak daripada persentuhan semasa mengandung dan menyusu. Basuh bahagian badan yang tercemar sebersih-bersihnya selepas pengendalian.
P270	Jangan makan, minum atau merokok semasa menggunakan produk ini.

Pernyataan Berjaga-jaga (Tindak Balas):

P305 + P351 + P338	JIKA TERKENA MATA: Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.
P308 + P313	Jika terdedah kepada bahan atau terkena bahan: Dapatkan nasihat/rawatan perubatan.
P391	Pungut tumpahan.
P337 + P313	Jika kerengsaan mata berterusan: Dapatkan nasihat/rawatan perubatan.

Pernyataan Berjaga-jaga (Penyimpanan):

P405	Simpan di tempat berkunci.
------	----------------------------

Pernyataan Berjaga-jaga (Pelupusan):

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

P501 Buangkan kandungan dan berkas ke tempat pengumpulan bahan sisa merbahaya atau khas.

Bahaya lain yang tidak menyebabkan pengelasan:

Lihat seksyen 12 - Keputusan PBT dan Penilaian vPvB

Jika berkenaan, maklumat yang diberikan dalam bahagian ini tentang bahaya lain tidak menyebabkan pengelasan tetapi mungkin menyumbang kepada bahaya bahan atau campuran secara keseluruhan.

Produk tidak mengandungi bahan melebihi had undang-undang yang termasuk di dalam senarai yang disediakan mengikut Artikel 59(1) Peraturan (EC) No. 1907/2006 kerana mengandungi ciri-ciri gangguan endokrin atau telah dikenalpasti untuk mengandungi ciri-ciri gangguan endokrin mengikut kriteria yang ditetapkan dalam Peraturan Wakilan Suruhanjaya (EU) 2017/2100 atau Peraturan Suruhanjaya (EU) 2018/605.

Boleh menyebabkan tindakbalas alahan : Mengandungi 1,2-benzisotiazol-3(2H)-on

3. Komposisi dan Maklumat Mengenai Ramuan Bahan Kimia

Kedadaan kimia

produk pelindung tanaman, racun serangga, pekatan ampaian (SC)

Ramuan berbahaya

Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Kandungan (berat/berat): 22.0 %	Pemb.
Nombor CAS: 139968-49-3	Pemb. 2 (fertility)
	Pemb. 2 (unborn child)
	STOT RE 2
	Akuatik Kronik 1
	Faktor-M kronik: 1000

Alcohols, C9-11-iso-, C10-rich, ethoxylated

Kandungan (berat/berat): < 5 %	Toks. Akut 4 (oral)
Nombor CAS: 78330-20-8	Kros./Kreng. Mata 1

Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.omega.-hydroxy-

Kandungan (berat/berat): < 5 %	Akuatik Kronik 3
Nombor CAS: 99734-09-5	

natrium-di-etil-heksil-sulfosukkinat

Kandungan (berat/berat): < 5 %	Kks./Kreng. Kulit 2
Nombor CAS: 577-11-7	Kros./Kreng. Mata 1

1,2-benzisotiazol-3(2H)-on

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Versi (Version): 7.0

Produk (Product): **Alverde®**

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Kandungan (berat/berat): < 0.05 %
Nombor CAS: 2634-33-5

Toks. Akut 4 (oral)
Kks./Kreng. Kulit 2
Kros./Kreng. Mata 1
Pem. Kulit 1
Akuatik Akut 1
Akuatik Kronik 1
Faktor-M akut: 1
Faktor-M kronik: 1

propan-1,2-diol

Kandungan (berat/berat): < 10 %
Nombor CAS: 57-55-6

Bagi pengelasan yang tidak ditulis dengan penuh dalam bahagian ini, teks lengkap boleh didapati di bahagian 16.

4. Langkah-Langkah Pertolongan Cemas

Nasihat am:

Tanggalkan pakaian yang tercemar.

Jika tersedut:

Tenangkan pesakit, alihkan ke tempat berudara bersih, dapatkan rawatan perubatan.

Apabila terkena kulit:

Basuh bersih-bersih dengan sabun dan air.

Apabila terkena mata:

basuh mata yang terkena bahan selama sekurang-kurangnya 15 minit dibawah air yang mengalir dengan kelopak mata dibuka, rujuk kepada pakar mata.

Apabila tertelan:

Segera berkumur, kemudian minum 200-300 ml air, dapatkan rawatan perubatan.

Nota kepada doktor:

Gejala: Maklumat, iaitu maklumat tambahan mengenai simptom dan kesan boleh termasuk di dalam fasa palabelan GHS yang tersedia ada dalam Seksyen 2 dan di dalam penaksiran Toksikologi yang tersedia ada dalam Seksyen 11., Simptom dan/atau kesan tidak diketahui setakat ini

Nota kepada doktor:

Rawatan: Rawat mengikut gejala (nyahcemar, fungsi utama), tiada penawar khusus diketahui.

5. Langkah-Langkah Pemadaman Kebakaran

Bahan pemadam yang sesuai:

busa, serbuk kering, karbon dioksida, semburan air

Bahaya tertentu:

karbon monoksida, hidrogen florida, hidrogen sianida, karbon dioksida, nitrogen oksida, sianida, sebatian halogen, Bahan silika, sulfur oksida

Bahan/kumpulan bahan yang dinyatakan boleh dibebaskan jika berlaku kebakaran.

Peralatan perlindungan khusus:

Gunakan alat pernafasan serba lengkap dan pakaian pelindung kimia.

Maklumat lanjut:

Dalam hal kebakaran dan/atau letupan jangan menyedut wasap. Pastikan bekas sejuk dengan menyembur air pada bekas jika terdedah kepada kebakaran. Kumpul air pemadam api yang tercemar secara berasingan, jangan biarkan ia mengalir ke dalam sistem pembetung atau effluen. Lupuskan sisa kebakaran dan air pemadam api yang tercemar menurut peraturan rasmi.

6. Langkah-Langkah Pelepasan Tidak Sengaja

Perlindungan diri, kelengkapan pelindung dan tatacara kecemasan:

Elakkan dari bersentuhan dengan kulit, mata dan pakaian. Gunakan pakaian pelindung diri. Jangan bernafaskan wap/semburan

Langkah berjaga-jaga untuk alam sekitar:

Jangan lepaskan ke dalam subtanah/tanah. Jangan lepaskan ke dalam parit/air permukaan/air tanah.

Kaedah pembersihan atau penyerapan:

Bagi sejumlah kecil: Kutip dengan bahan penyerap yang sesuai (contohnya pasir, habuk gergaji, pengikat serba guna, kieselguhr).

Bagi sejumlah besar: Bina benteng tumpahan. Pam produk.

Lupuskan bahan yang diserap mengikut peraturan. Kumpul sisa ke dalam bekas yang sesuai, yang boleh dilabel dan ditutup ketat. Basuh bersih-bersih lantai dan objek yang tercemar dengan air dan bahan pencuci, patuhi peraturan alam sekitar.

7. Pengendalian dan Penyimpanan

Pengendalian

Tiada langkah khusus diperlukan dengan syarat produk disimpan dan digunakan dengan betul.

Pastikan pengalihudaraan menyeluruh di kawasan simpanan dan di tempat kerja. Jangan makan, minum atau merokok apabila menggunakannya. Tangan dan/atau muka hendaklah dibasuh sebelum rehat dan setelah tamat waktu bekerja.

Perlindungan terhadap kebakaran dan letupan:

Tiada langkah berjaga-jaga yang khusus diperlukan. Bahan/produk tidak mudah terbakar. Produk tidak meletup.

Penyimpanan

Asingkan daripada makanan dan makanan haiwan.

Maklumat lanjut tentang keadaan penyimpanan: Jauhkan daripada panas. Lindungi daripada pancaran terus cahaya matahari.

Kestabilan penyimpanan:

Tempoh penyimpanan: 60 bulan

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Versi (Version): 7.0

Produk (Product): **Alverde®**

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Lindungi daripada suhu di bawah : 0 °C

Perubahan pada ciri produk boleh berlaku jika bahan/produk disimpan di bawah suhu yang dinyatakan untuk tempoh yang panjang.

Lindungi daripada suhu melebihi : 40 °C

Perubahan ciri produk boleh berlaku jika bahan/produk disimpan melebihi suhu yang dinyatakan bagi tempoh yang panjang.

8. Kawalan pendedahan dan perlindungan diri

Komponen dengan parameter kawalan tempat kerja

Tiada had pendedahan pekerjaan yang diketahui.

Peralatan perlindungan peribadi

Perlindungan pernafasan:

Perlindungan pernafasan yang sesuai bagi kepekatan yang rendah atau kesan jangka pendek: Penapis gabungan bagi gas/wap sebatian organik, tak organik, asid tak organik, alkali dan zarah toksik (contohnya EN 14387 Jenis ABEK-P3)

Perlindungan tangan:

Sarung tangan kalis kimia yang sesuai (EN ISO 374-1) jika terkena secara langsung yang berpanjangan (Disyorkan: Indeks pelindung 6, sama dengan masa penelapan > 480 minit mengikut EN ISO 374-1): Misalnya getah nitril (0.4 mm), getah kloroprena (0.5 mm), polivinilklorida (0.7 mm) dan lainnya.

Perlindungan mata:

Kaca mata keselamatan dengan pelindung sisi (gogal berbingkai) (contohnya EN 166)

Perlindungan badan:

Perlindungan badan mesti dipilih bergantung kepada aktiviti dan pendedahan, contohnya apron, kasut perlindungan, pakaian perlindungan bahan kimia (Berdasarkan DIN-EN 465)

Langkah kebersihan dan keselamatan am:

Penyataan tentang kelengkapan pelindung diri dalam arahan penggunaan terpakai untuk penggunaan agen pelindung pertanian bagi pembungkusan terakhir. Disyorkan memakai pakaian kerja yang tertutup. Simpan pakaian kerja secara berasingan. Jauhkan daripada makanan, minuman dan barang makanan haiwan.

9. Sifat Fizikal dan Kimia

Bentuk: cecair
Warna: putih
Bau: wangi sedikit
Ambang bau: Tidak ditentukan kerana berbahaya melalui penyedutan.

nilai pH: dianggarkan 6 - 8
(20 °C)
(diukur dengan bahan yang tidak dicairkan)

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

suhu penghabluran:	-2.3 °C	
takat didih:	dianggarkan 100 °C	(diukur)
Takat kilat:	Tiada takat kilat- Ukuran dibuat sehingga ke takat didih.	(Arahan 92/69/EEC, A.9)
Tahap penyejatan:	Tidak boleh digunakan	
Kemudahbakaran (pepejal/gas):	Tidak boleh digunakan	
Had letupan bawah:	Hasil pengalaman kami dengan produk ini dan pengetahuan kami mengenai komposisinya kami menjangka tidak terdapat bahaya selagi produk ini digunakan dengan cara yang sesuai dan menurut penggunaan yang dicadangkan.	
Had letupan atas:	Hasil pengalaman kami dengan produk ini dan pengetahuan kami mengenai komposisinya kami menjangka tidak terdapat bahaya selagi produk ini digunakan dengan cara yang sesuai dan menurut penggunaan yang dicadangkan.	
Suhu pencucuhan:	485 °C	(Arahan 92/69/EEC, A.15)
Penguraian terma:	170 °C , 40 kJ/kg	(DDK (OECD 113))
	240 °C , 135 kJ/kg	(DDK (OECD 113))
Bahaya letupan:	Bahan tidak boleh mengurai sendiri menurut peraturan-peraturan pengangkutan UN, kelas 4.1 tidak mudah meletup	
Sifat yang menggalakkan kebakaran:	Berdasarkan sifat strukturnya produk ini tidak diklasifikasikan sebagai pengoksida.	
Tekanan Wap:	dianggarkan 23.3 hPa (20 °C) Maklumat terpakai kepada pelarut.	
Kepekatan:	dianggarkan 1.08 g/cm ³ (20 °C)	
Ketumpatan wap relatif (udara):	Tidak boleh digunakan	
Keterlarutan dalam air:	mudah terserak	
Pekali petakan n-oktanol/air (log Pow):	Tidak boleh digunakan	

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Kelikatan, dinamik: 26 mPa.s
(20 °C, 100 1/s)

Maklumat lain:

Jika perlu, maklumat tentang parameter fizikal and kimia ada dinyatakan didalam bahagian ini.

10. Kestabilan dan Kereaktifan

Keadaan yang perlu dielakkan:

Lihat MSDS bahagian 7 - Pengendalian dan Penyimpanan.

Penguraian terma: 170 °C, 40 kJ/kg (DDK (OECD 113))

Penguraian terma: 240 °C, 135 kJ/kg (DDK (OECD 113))

Penguraian terma: Bahan tidak boleh mengurai sendiri menurut peraturan-peraturan pengangkutan UN, kelas 4.1

Bahan yang perlu dielakkan:

asid kuat, bes kuat, agen pengoksida yang kuat

Tindak balas berbahaya:

Tiada produk penguraian yang berbahaya jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.

Bahan penguraian berbahaya:

Tiada produk penguraian yang berbahaya jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.

Kereaktifan:

Tiada produk penguraian yang berbahaya jika disimpan dan dikendalikan seperti yang ditetapkan/dinyatakan.

Kestabilan kimia:

Produk adalah stabil jika disimpan dan dikendalikan sebagaimana

11. Maklumat Toksikologi

Ketoksikan akut

Penilaian ketoksikan akut:

Tidak toksik selepas sekali terkena kulit Tidak toksik selepas sekali ditelan. Tidak toksik jika tertersedut.

Data eksperimen/dikira:

LD50 tikus (melalui mulut): > 2,000 mg/kg (Garispanduan OECD 423)

Tiada kematian diperhatikan

LC50 tikus (melalui penyedutan): > 5.2 mg/l 4 h (Garispanduan OECD 403)

Tiada kematian diperhatikan

LD50 tikus (dermal): > 4,000 mg/kg (Garispanduan OECD 402)

Tiada kematian diperhatikan

Kerengsaan

Penilaian kesan merengsa:

Sentuhan dengan mata boleh menyebabkan kerengsaan. Tidak merengsakan kulit.

Data eksperimen/dikira:

Kakistan/Kerengsaan kulit arnab:

Kerosakkan/kerengsaan mata yang serius arnab:

Pemekaan pernafasan/kulit

Penilaian pemekaan:

Tidak terdapat bukti pemekaan kulit yang berpotensi.

Data eksperimen/dikira:

ujian Buehler berubah suai marmut:

Kemutagenan sel germa

Penilaian kemutagenan:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : natrium-di-etil-heksil-sulfosukkinat

Penilaian kemutagenan:

Bahan tidak mutagen dalam bakteria. Ujian kemutagenan menggunakan sel mamalia memberikan keputusan yang diragui. Walau bagaimanapun, bahan yang berkaitan dari segi struktur bukan mutagen. Produk belum diuji sepenuhnya. Pernyataan diambil sebahagiannya daripada produk yang mempunyai struktur dan komposisi yang sama. Keputusan dari sejumlah kajian terhadap kemutagenan dengan mikroorganisma dan kultur sel mamalia dan mamalia ada didapati. Setelah mengambil kira semua maklumat tersebut, tidak ada tanda yang menunjukkan bahan ini adalah mutagen.

Kekarsinogenan

Penilaian kekarsinogenan:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen. Keputusan pelbagai ujian haiwan tidak menunjukkan kesan karsonogen.

Ketoksikan pembiakan

Penilaian ketoksikan pembiakan:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Penilaian ketoksikan pembiakan:

Keputusan dari kajian terhadap haiwan nenunjukkan kesan merosakkan Boleh membahayakan kanak-kanak melalui penyusuan ibu.

Ketoksikan perkembangan

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Versi (Version): 7.0

Produk (Product): **Alverde®**

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Penilaian keteratogenan:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Penilaian keteratogenan:

Petunjuk toksik yang berkembang/kesan teratogen dilihat dalam ujian ke

Maklumat tentang : natrium-di-etil-heksil-sulfosukinat

Penilaian keteratogenan:

Bahan tidak menyebabkan kecacatan dalam kajian terhadap haiwan; walau

Ketoksikan khusus organ sasaran (sekali pendedahan):

Penilaian sekali STOT:

Berdasarkan maklumat yang ada, ketoksikan organ sasaran yang khusus adalah tidak dijangka selepas sekali pendedahan.

Catatan: Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Ketoksikan dos berulang dan Ketoksikan organ sasaran tertentu (pededahan berulang)

Penilaian ketoksikan dos berulang:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Penilaian ketoksikan dos berulang:

Pendedahan berulang-ulang melalui mulut mungkin memberi kesan kepada organ tertentu.

Bahaya penyedutan

Tiada bahaya penyedutan dijangka.

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat lain yang berkaitan dengan ketoksikan

Penyalahgunaan boleh memudaratkan kesihatan.

12. Maklumat Ekologi

Keekotoksikan

Penilaian ketoksikan akuatik:

Sangat toksik kepada hidupan akuatik dengan kesan yang berpanjangan.

Ketoksikan kepada ikan:

LC50 (96 h) 3.4 mg/l, *Oncorhynchus mykiss*

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Invertebrat air:

EC50 (48 h) 11.7 mg/l, Daphnia magna

Tumbuhan akuatik:

EC50 (72 h) 44.7 mg/l (kadar pertumbuhan), Selenastrum capricornutum

Tiada kesan kepekatan yang diperhatikan 5.5 mg/l, Selenastrum capricornutum

Ketoksikan kronik kepada ikan:

Tiada kesan kepekatan yang diperhatikan (148 hari) > 0.069 mg/l, Brachydanio rerio

Maklumat tentang : Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Ketoksikan kronik kepada invertebrata akuatik:

Tiada kesan kepekatan yang diperhatikan (21 hari), 0.00147 mg/l, Daphnia magna

Tiada kesan kepekatan yang diperhatikan (28 hari), 0.000654 mg/l, Mysidopsis bahia

Mobiliti

Penilaian pengangkutan di antara bahagian di persekitaran:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Penilaian pengangkutan di antara bahagian di persekitaran:

Diikuti dengan pendedahan kepada tanah, penjerapan ke atas zarah tanah

Keterusan dan boleh keterdegradasikanPenilaian biodegradasi dan penyingkiran (H₂O):

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Potensi Biotumpukan

Penilaian potensi bioakumulasi:

Produk belum diuji. Penyataan diambil daripada ciri setiap komponen.

Maklumat tentang : Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Potensi Biotumpukan:

Faktor Kebiopekatan: 800, Brachydanio rerio

Tidak dijangka terakumulasi dalam organisma.

Faktor Kebiopekatan: 1,071, Pimephales promelas

Berdasarkan berat bukti, sebatian tidak akan bioakumulasi.

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Maklumat tambahan

Nasihat ekotoksikologi lain:

Jangan lepaskan produk ke persekitaran tanpa kawalan.

13. Maklumat Pelupusan

Mesti dihantar ke loji pembakaran yang sesuai, mematuhi peraturan

Pembungkusan tercemar:

Bungkusan yang tercemar hendaklah dikosongkan sejauh yang boleh dan dilupuskan dengan cara yang sama melupuskan bahan/produk.

14. Maklumat Pengangkutan

Pengangkutan domestik:

Kelas bahaya: 9

Kumpulan pembungkusan: III

Nombor-ID: UN 3082

Label Bahaya: 9, EHSM

Nama pengantaran yang betul: BAHAN YANG MEMBAHAYAKAN ALAM SEKITAR, CECAIR, N.O.S (mengandungi NATRIUM DIETILHEKSILSULFOSUKKINAT, HYDRAZINE CARBOXAMIDE)

Maklumat lanjut

Kod Hazchem:3Z

Nombor IERG:47

Pengangkutan laut

IMDG

Kelas bahaya: 9

Kumpulan pembungkusan: III

Nombor-ID: UN 3082

Label Bahaya: 9, EHSM

Bahan pencemar laut: YA

Nama pengantaran yang betul: BAHAN YANG MEMBAHAYAKAN ALAM SEKITAR, CECAIR, N.O.S (mengandungi NATRIUM DIETILHEKSILSULFOSUKKINAT, HYDRAZINE CARBOXAMIDE)

Pengangkutan udara

IATA/ICAO

Kelas bahaya: 9

Kumpulan pembungkusan: III

Nombor-ID: UN 3082

Label Bahaya: 9, EHSM

Nama pengantaran yang betul: BAHAN YANG MEMBAHAYAKAN ALAM SEKITAR, CECAIR,

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

betul: N.O.S (mengandungi NATRIUM DIETILHEKSILSULFOSUKKINAT, HYDRAZINE CARBOXAMIDE)

Pengangkutan secara pukal menurut Lampiran II MARPOL dan IBC

Peraturan:	Tidak dinilai
Pengantaran yang diluluskan:	Tidak dinilai
Nama pencemaran:	Tidak dinilai
Kategori pencemaran:	Tidak dinilai
Jenis Kapal:	Tidak dinilai

Maklumat lanjut

Peraturan-peraturan berikut digunapakai untuk produk yang mengandungi kuantiti bersih 5L atau kurang daripada itu

ADR, RID, AND: Peraturan Khas 375;

JT/T617.3;

IMDG: 2.10.2.7;

IATA: A197;

TDG: Peraturan Khas 99(2);

49CFR: §171.4 (c) (2).

15. Maklumat Pengawalseliaan

Peraturan-Peraturan Keselamatan dan Kesihatan Pekerjaan (Pengelasan, Pelabelan dan Helaian Data Keselamatan Bahan kimia Berbahaya) 2013

Akta OSHA 1994 dan peraturan berkaitan

Akta Kualiti Alam Sekeliling 1974

Maklumat tentang peraturan-peraturan tidak meliputi kesemuanya. Peraturan-peraturan lain mungkin dikenakan kepada bahan ini.

Peraturan lain

Terpakai pada pengguna alat pelindung : ' Untuk mengelakkan risiko kepada manusia dan alam sekitar, patuhi arahan penggunaan.' (Arahan 1999/45/EEC, Artikel 10, No 1.2)

16. Maklumat lain

Tarikh Penyediaan / Tarikh Penyemakan: 19.04.2023

Sumber Maklumat dan Rujukan :

SDS ini disediakan dengan menggunakan data dan maklumat tersimpan di dalam sistem berasaskan IT dalaman kami dan dibekalkan oleh pembekal perkhidmatan syarikat kami.

Singkatan Petunjuk:

ATE - Anggaran Ketoksikan Akut

GHS - Sistem Terharmoni Global

IATA / ICAO - Persatuan Pengangkutan Udara Antarabangsa / Organisasi Penerbangan Awam Antarabangsa

IBC - Kontena Pukul Pertengahan
 IMDG - Barangan Merbahaya Kelautan Antarabangsa
 LC - Kepekatan Maut
 LD - Dos Maut
 OECD - Organisasi Untuk Kerjasama dan Pembangunan Ekonomi
 OEL - Had Pendedahan Pekerjaan
 OSHA - Akta Keselamatan dan Kesihatan Pekerjaan
 STOT - Ketoksikan Organ Sasaran Khusus

Teks penuh pengelasan, simbol bahaya dan pernyataan bahaya, jika dinyatakan dalam seksyen 2 atau 3:

Bhn. Ltp. T. Stab.	Bahan letup tidak stabil
Bhn. Ltp. 1.1	Bahan letup divisyen 1.1
Bhn. Ltp. 1.2	Bahan letup divisyen 1.2
Bhn. Ltp. 1.3	Bahan letup divisyen 1.3
Bhn. Ltp. 1.4	Bahan letup divisyen 1.4
Bhn. Ltp. 1.5	Bahan letup divisyen 1.5
Bhn. Ltp. 1.6	Bahan letup divisyen 1.6
Gas M. Bkr 1	Gas mudah terbakar kategori 1
Gas M. Bkr 2	Gas mudah terbakar kategori 2
Aerosol M. Bkr1	Aerosol mudah terbakar kategori 1
Aerosol M. Bkr 2	Aerosol mudah terbakar kategori 2
Cec. M. Bkr 1	Cecair mudah terbakar kategori 1
Cec. M. Bkr 2	Cecair mudah terbakar kategori 2
Cec. M. Bkr 3	Cecair mudah terbakar kategori 3
Pep. M. Bkr 1	Pepejal mudah terbakar kategori 1
Pep. M. Bkr 2	Pepejal mudah terbakar kategori 2
Gas Oks. 1	Gas mengoksida kategori 1
Cec. Oks. 1	Cecair mengoksida kategori 1
Cec. Oks. 2	Cecair mengoksida kategori 2
Cec. Oks. 3	Cecair mengoksida kategori 3
Pep. Oks. 1	Pepejal mengoksida kategori 1
Pep. Oks. 2	Pepejal mengoksida kategori 2
Pep. Oks. 3	Pepejal mengoksida kategori 3
Gas Tkn.	Gas di bawah tekanan
Swareak. A	Bahan kimia swareaktif jenis A
Swareak. B	Bahan kimia swareaktif jenis B
Swareak. CD	Bahan kimia swareaktif jenis C dan D
Swareak. EF	Bahan kimia swareaktif jenis E dan F
Swareak. G	Bahan kimia swareaktif jenis G
Cec. Pir. 1	Cecair piroforik kategori 1
Pep. Pir. 1	Pepejal piroforik kategori 1
Swapanas. 1	Bahan kimia swapanasan kategori 1
Swapanas. 2	Bahan kimia swapanasan kategori 2
Tdk. Bls. Air 1	Bahan kimia yang, jika terkena air, membebaskan gas mudah terbakar kategori 1
Tdk. Bls. Air 2	Bahan kimia yang, jika terkena air, membebaskan gas mudah terbakar kategori 2
Tdk. Bls. Air 3	Bahan kimia yang, jika terkena air, membebaskan gas mudah terbakar kategori 3
Peroks. Org. A	Peroksida organik jenis A
Peroks. Org. B	Peroksida organik jenis B
Peroks. Org. CD	Peroksida organik jenis C and D

Peroks. Org. EF	Peroksida organik jenis E and F
Peroks. Org. G	Peroksida organik jenis G
Kakis. Log. 1	Mengakis logam kategori 1
Toks. Akut 1	Ketoksikan akut kategori 1
Toks. Akut 2	Ketoksikan akut kategori 2
Toks. Akut 3	Ketoksikan akut kategori 3
Toks. Akut 4	Ketoksikan akut kategori 4
Kks. Kulit 1A	Kakisan atau kerengsaan kulit kategori 1A
Kks. Kulit 1B	Kakisan atau kerengsaan kulit kategori 1B
Kks. Kulit 1C	Kakisan atau kerengsaan kulit kategori 1C
Kreng. Kulit 2	Kakisan atau kerengsaan kulit kategori 2
Kros. Mata 1	Kerosakan mata atau kerengsaan mata yang serius kategori 1
Kreng. Mata 2	Kerosakan mata atau kerengsaan mata yang serius kategori 2
Pem. Naf. 1	Pemekaan pernafasan kategori 1
Pem. Kulit 1	Pemekaan kulit kategori 1
Muta. 1A	Kemutagenan sel germa kategori 1A
Muta. 1B	Kemutagenan sel germa kategori 1B
Muta. 2	Kemutagenan sel germa kategori 2
Kars. 1A	Kekarsinogenan kategori 1A
Kars. 1B	Kekarsinogenan kategori 1B
Kars. 2	Kekarsinogenan kategori 2
Pemb. 1A	Ketoksikan pembiakan kategori 1A
Pemb. 1B	Ketoksikan pembiakan kategori 1B
Pemb. 2	Ketoksikan pembiakan kategori 2
Laktasi	Kesan ke atas atau melalui penyusuan
STOT SE 1	Ketoksikan organ sasaran khusus - pendedahan tunggal kategori 1
STOT SE 2	Ketoksikan organ sasaran khusus - pendedahan tunggal kategori 2
STOT SE 3	Ketoksikan organ sasaran khusus - pendedahan tunggal kategori 3
STOT RE 1	Ketoksikan organ sasaran khusus - pendedahan berulang kategori 1
STOT RE 2	Ketoksikan organ sasaran khusus - pendedahan berulang kategori 2
Bhy. Asp.	Bahaya aspirasi kategori 1
Akuatik Akut 1	Berbahaya kepada persekitaran akuatik – bahaya akut kategori 1
Akuatik Kronik 1	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 1
Akuatik Kronik 2	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 2
Akuatik Kronik 3	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 3
Akuatik Kronik 4	Berbahaya kepada persekitaran akuatik – bahaya kronik kategori 4
Ozon	Berbahaya bagi lapisan ozon kategori 1

Garis menegak pada margin sebelah kiri tangan menunjukkan pindaan dari versi sebelumnya.

Data yang terdapat dalam risalah data keselamatan ini adalah berdasarkan pengetahuan dan pengalaman kami, dan menerangkan tentang produk yang berkaitan dengan keperluan keselamatan sahaja. Data tidak menyatakan ciri produk (spesifikasi produk). Data dalam risalah data keselamatan ini juga tidak menyatakan apa-apa ciri khusus atau kesesuaian produk yang dipersetujui untuk apa-apa tujuan tertentu. Penerima produk bertanggungjawab untuk memastikan bahawa apa-apa hak pemilikan serta undang-undang dan perundangan sedia ada dipatuhi.

1. Identification of the chemical and of the supplier

Alverde®

Use: crop protection product, insecticide

Company:

BASF (Malaysia) Sdn Bhd
Lot 19.02 Level 19, 1 Powerhouse
No 1 Persiaran Bandar Utama
47800 Petaling Jaya
Selangor D.E, MALAYSIA
Telephone: +60 3 7612 1888
Telefax number: +60 3 7612 1777

Emergency information:

National emergency number:
+603 7612 1999

International emergency number:
Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:

Aquatic Chronic 1

STOT RE 2

Repr. Additional category for effects on or via lactation.

Repr. 2 (fertility)

Eye Dam./Irrit. 2

Repr. 2 (unborn child)

For the classifications not written out in full in this section the full text can be found in section 16.

Label elements and precautionary statement:

Pictogram:



Signal Word:

Warning

Hazard Statement:

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Versi (Version): 7.0

Produk (Product): **Alverde®**

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H362	May cause harm to breast-fed children.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H410	Very toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statement:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P260	Do not breathe mist or vapour or spray.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash contaminated body parts thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical attention.
P391	Collect spillage.
P337 + P313	If eye irritation persists: Get medical attention.

Precautionary Statements (Storage):

P405	Store locked up.
------	------------------

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
------	---

Other hazards which do not result in classification:

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

May produce an allergic reaction. Contains: 1,2-benzisothiazol-3(2H)-one

3. Composition/information on ingredients

Chemical nature

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Versi (Version): 7.0

Produk (Product): **Alverde®**

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

crop protection product, insecticide, suspension concentrate (SC)

Hazardous ingredients

Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Content (W/W): 22.0 %

CAS Number: 139968-49-3

Repr. Add. cat. lact.

Repr. 2 (fertility)

Repr. 2 (unborn child)

STOT RE 2

Aquatic Chronic 1

M-factor chronic: 1000

Alcohols, C9-11-iso-, C10-rich, ethoxylated

Content (W/W): < 5 %

CAS Number: 78330-20-8

Acute Tox. 4 (oral)

Eye Dam./Irrit. 1

Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.omega.-hydroxy-

Content (W/W): < 5 %

CAS Number: 99734-09-5

Aquatic Chronic 3

sodium-di-ethyl-hexyl-sulfosuccinate

Content (W/W): < 5 %

CAS Number: 577-11-7

Skin Corr./Irrit. 2

Eye Dam./Irrit. 1

1,2-benzisothiazol-3(2H)-one

Content (W/W): < 0.05 %

CAS Number: 2634-33-5

Acute Tox. 4 (oral)

Skin Corr./Irrit. 2

Eye Dam./Irrit. 1

Skin Sens. 1

Aquatic Acute 1

Aquatic Chronic 1

M-factor acute: 1

M-factor chronic: 1

propane-1,2-diol

Content (W/W): < 10 %

CAS Number: 57-55-6

For the classifications not written out in full in this section the full text can be found in section 16.

4. First-Aid Measures

General advice:

Remove contaminated clothing.

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Note to physician:

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

foam, dry powder, carbon dioxide, water spray

Specific hazards:

carbon monoxide, hydrogen fluoride, hydrogen cyanide, carbon dioxide, nitrogen oxides, cyanides, halogenated compounds, silica compounds, sulfur oxides

The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Avoid contact with the skin, eyes and clothing. Use personal protective clothing. Do not breathe vapour/spray.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 60 Months

Protect from temperatures below: 0 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure controls and personal protection

Components with occupational exposure limits

No occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	liquid	
Colour:	white	
Odour:	faintly aromatic	
Odour threshold:	Not determined since harmful by inhalation.	
pH value:	approx. 6 - 8 (20 °C) (measured with the undiluted substance)	
crystallization temperature:	-2.3 °C	
Boiling point:	approx. 100 °C	(measured)
Flash point:	No flash point - Measurement made up to the boiling point.	(Directive 92/69/EEC, A.9)
Evaporation rate:	not applicable	
Flammability (solid/gas):	not applicable	
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Ignition temperature:	485 °C	(Directive 92/69/EEC, A.15)
Thermal decomposition:	170 °C , 40 kJ/kg	(DSC (OECD 113))

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Versi (Version): 7.0

Produk (Product): **Alverde®**

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

240 °C , 135 kJ/kg (DSC (OECD 113))

Explosion hazard: Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
not explosive
Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

Vapour pressure: approx. 23.3 hPa
(20 °C)
Information applies to the solvent.

Density: approx. 1.08 g/cm³
(20 °C)

Relative vapour density (air):
not applicable

Solubility in water: dispersible
Partitioning coefficient n-octanol/water (log Pow):
not applicable

Viscosity, dynamic: 26 mPa.s
(20 °C, 100 1/s)

Other Information:
If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:
See SDS section 7 - Handling and storage.

Thermal decomposition: 170 °C, 40 kJ/kg (DSC (OECD 113))

Thermal decomposition: 240 °C, 135 kJ/kg (DSC (OECD 113))

Thermal decomposition: Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Substances to avoid:
strong acids, strong bases, strong oxidizing agents

Hazardous reactions:
No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

Reactivity:
No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability:

The product is stable if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single skin contact. Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

No mortality was observed.

LC50 rat (by inhalation): > 5.2 mg/l 4 h (OECD Guideline 403)

No mortality was observed.

LD50 rat (dermal): > 4,000 mg/kg (OECD Guideline 402)

No mortality was observed.

Irritation

Assessment of irritating effects:

Eye contact causes irritation. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit:

Serious eye damage/irritation rabbit:

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

modified Buehler test guinea pig:

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: sodium-di-ethyl-hexyl-sulfosuccinate

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. A mutagenicity test using mammalian cells yielded equivocal results. However, structurally related substances were not mutagenic. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition. Results from a number of mutagenicity studies with microorganisms, mammalian cell

culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Assessment of reproduction toxicity:

The results of animal studies suggest a fertility impairing effect. May cause harm to children via breast-feeding.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Assessment of teratogenicity:

Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Information on: sodium-di-ethyl-hexyl-sulfosuccinate

Assessment of teratogenicity:

The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses which impaired body weight gain in parental animals.

Specific target organ toxicity (single exposure):

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-
Assessment of repeated dose toxicity:
Repeated oral exposure may affect certain organs.

Aspiration hazard

No aspiration hazard expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Toxicity to fish:

LC50 (96 h) 3.4 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h) 11.7 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 44.7 mg/l (growth rate), *Selenastrum capricornutum*

No observed effect concentration 5.5 mg/l, *Selenastrum capricornutum*

Chronic toxicity to fish:

No observed effect concentration (148 d) > 0.069 mg/l, *Brachydanio rerio*

Information on: Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), 0.00147 mg/l, *Daphnia magna*

No observed effect concentration (28 d), 0.000654 mg/l, *Mysidopsis bahia*

Mobility

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Hydrazinecarboxamide, 2-[2-(4-cyanophenyl)-1-[3-(trifluoromethyl)phenyl]ethylidene]-N-[4-(trifluoromethoxy)phenyl]-

Bioaccumulation potential:

Bioconcentration factor: 800, Brachydanio rerio

Accumulation in organisms is not to be expected.

Bioconcentration factor: 1,071, Pimephales promelas

Based on a weight of evidence, the compound will not bioaccumulate.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Information

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

14. Transportation Information

Domestic transport:

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains SODIUM DIETHYLHEXYL SULFOSUCCINATE, HYDRAZINE CARBOXAMIDE)

Further information

Hazchem Code:3Z

IERG Number:47

Sea transport

IMDG

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Marine pollutant: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains SODIUM DIETHYLHEXYL SULFOSUCCINATE, HYDRAZINE CARBOXAMIDE)

Air transport

IATA/ICAO

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains SODIUM DIETHYLHEXYL SULFOSUCCINATE, HYDRAZINE CARBOXAMIDE)

Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation: Not evaluated
Shipment approved: Not evaluated
Pollution name: Not evaluated
Pollution category: Not evaluated
Ship Type: Not evaluated

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375;

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

OSHA 1994 and relevant regulations

Environmental Quality Act, 1974

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Other regulations

For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

16. Other Information

Date of Preparation / Date of Revision: 19.04.2023

Information Source and References:

This SDS is prepared using data and information saved in our internal IT-based system and supplied by our company's service providers.

Key Abbreviations:

ATE - Acute Toxicity Estimates

GHS - Globally Harmonized System

IATA / ICAO - International Air Transport Association / International Civil Aviation Organization

IBC - Intermediate Bulk Container

IMDG - International Maritime Dangerous Goods

LC - Lethal Concentration

LD - Lethal Dose

OECD - Organisation for Economic Co-operation and Development

OEL - Occupational Exposure Limit

OSHA - Occupational Safety and Health Act

STOT - Specific Target Organ Toxicity

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Unst. Expl.	Unstable explosives
Expl. 1.1	Explosives division 1.1
Expl. 1.2	Explosives division 1.2
Expl. 1.3	Explosives division 1.3
Expl. 1.4	Explosives division 1.4
Expl. 1.5	Explosives division 1.5
Expl. 1.6	Explosives division 1.6
Flam. Gas 1	Flammable gases category 1

Flam. Gas 2	Flammable gases category 2
Flam. Aerosol 1	Flammable aerosols category 1
Flam. Aerosol 2	Flammable aerosols category 2
Flam. Liq. 1	Flammable liquids category 1
Flam. Liq. 2	Flammable liquids category 2
Flam. Liq. 3	Flammable liquids category 3
Flam. Sol. 1	Flammable solids category 1
Flam. Sol. 2	Flammable solids category 2
Ox. Gas 1	Oxidizing gases category 1
Ox. Liq. 1	Oxidizing liquids category 1
Ox. Liq. 2	Oxidizing liquids category 2
Ox. Liq. 3	Oxidizing liquids category 3
Ox. Sol. 1	Oxidizing solids category 1
Ox. Sol. 2	Oxidizing solids category 2
Ox. Sol. 3	Oxidizing solids category 3
Press. Gas	Gases under pressure
Self-react. A	Self-reactive chemicals type A
Self-react. B	Self-reactive chemicals type B
Self-react. CD	Self-reactive chemicals type C and D
Self-react. EF	Self-reactive chemicals type E and F
Self-react. G	Self-reactive chemicals type G
Pyr. Liq. 1	Pyrophoric liquids category 1
Pyr. Sol. 1	Pyrophoric solids category 1
Self-heat. 1	Self-heating chemicals category 1
Self-heat. 2	Self-heating chemicals category 2
Water-react. 1	Chemicals which, if in contact with water, emits flammable gases category 1
Water-react. 2	Chemicals which, if in contact with water, emits flammable gases category 2
Water-react. 3	Chemicals which, if in contact with water, emits flammable gases category 3
Org. Perox. A	Organic peroxides type A
Org. Perox. B	Organic peroxides type B
Org. Perox. CD	Organic peroxides type C and D
Org. Perox. EF	Organic peroxides type E and F
Org. Perox. G	Organic peroxides type G
Met. Corr. 1	Corrosive to metals category 1
Acute Tox. 1	Acute toxicity category 1
Acute Tox. 2	Acute toxicity category 2
Acute Tox. 3	Acute toxicity category 3
Acute Tox. 4	Acute toxicity category 4
Skin Corr. 1A	Skin corrosion or irritation category 1A
Skin Corr. 1B	Skin corrosion or irritation category 1B
Skin Corr. 1C	Skin corrosion or irritation category 1C
Skin Irrit. 2	Skin corrosion or irritation category 2
Eye Dam. 1	Serious eye damage or eye irritation category 1
Eye Irrit. 2	Serious eye damage or eye irritation category 2
Resp. Sens. 1	Respiratory sensitization category 1
Skin Sens. 1	Skin sensitization category 1
Muta. 1A	Germ cell mutagenicity category 1A
Muta. 1B	Germ cell mutagenicity category 1B
Muta. 2	Germ cell mutagenicity category 2
Carc. 1A	Carcinogenicity category 1A
Carc. 1B	Carcinogenicity category 1B

BASF Helaian Data Keselamatan (BASF Safety data sheet)

Tarikh / Disemak (Date / Revised): 19.04.2023

Produk (Product): **Alverde®**

Versi (Version): 7.0

(30265083/SDS_CPA_MY/MS)

Tarikh cetakan (Date of print): 18.03.2024

Carc. 2	Carcinogenicity category 2
Repr. 1A	Reproductive toxicity category 1A
Repr. 1B	Reproductive toxicity category 1B
Repr. 2	Reproductive toxicity category 2
Lact.	Effect on or via lactation
STOT SE 1	Specific target organ toxicity – single exposure category 1
STOT SE 2	Specific target organ toxicity – single exposure category 2
STOT SE 3	Specific target organ toxicity – single exposure category 3
STOT RE 1	Specific target organ toxicity – repeated exposure category 1
STOT RE 2	Specific target organ toxicity – repeated exposure category 2
Asp. Haz.	Aspiration hazard category 1
Aquatic Acute 1	Hazardous to the aquatic environment – acute hazard category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – chronic hazard category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – chronic hazard category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – chronic hazard category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – chronic hazard category 4
Ozone	Hazardous to the ozone layer category 1

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.